

with the author's comment

INTRODUCTORY LECTURE

ON

THE HISTORY OF MIDWIFERY.

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BY

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INTRODUCTORY LECTURE

ON

THE HISTORY OF MIDWIFERY.

GENTLEMEN,—The regulations of the examining bodies, which have restricted lectures on Midwifery to a short summer course, have obliged me to use the strictest economy in the disposal of that period. Hence I have avoided as much as possible giving “Introductory Lectures.” However, the progress which midwifery has certainly made as an art, and the attention which it is now receiving, led me to the conclusion that it might be well to give you an outline of its history, in order to point out to you the course which it has steadily but gradually pursued, and the results which it has obtained; and especially to warn you of the shoals and rocks which lie in the way of those who would embark upon its waters, and hope to pilot themselves safely to a harbour of success.

In the history of midwifery, it is not necessary for me to occupy your time with details of its early origin. I need not commence with Esau and Jacob,

and detail to you the several remarkable births in the Sacred Writings. I shall not dwell upon the midwifery of the Greek, Roman, and Saracenic periods; it will be sufficient if I prove to you that, when the delivery of women was left almost exclusively to their own sex, the great fathers of medicine, Hippocrates and Celsus, did not neglect midwifery. After them, Moschion, Ætius, and Paulus of Egina, followed up the subject, and published several very valuable observations.

Some idea may be formed of the state of midwifery in the days of Hippocrates, from the simple fact that he laid down the rule that, when the child lies either across the womb or presents the feet, the woman cannot be delivered; and compares the case to an olive in a bottle, which can easily be drawn through lengthways, but, if the olive be thrown across the neck of the bottle, it cannot be extracted without either crushing the olive or breaking the bottle.

Celsus had a faint idea of the operation of turning when he stated that, in cross births, the hand should be directed to the head *or the feet*;* but, unfortunately, the efforts were always directed to replace the head, but not to seize the feet.

Ætius, who wrote about the fourth century, compiles the works of his predecessors: pointing out that malposition of the child was not the only difficulty in delivery, but also that the maternal parts may also interfere. He mentions narrowness of the pelvis, anchylosis of the os pubis, and the presence of polypi, as causes of obstruction; and further adds, that the

* “Medici vero propositum est, ut cum manu dirigat vel in caput aut etiam in pedes, si forte aliter compositus est.” (Celsus.)

soft parts themselves are sometimes a cause. To remove these difficulties, a plan was proposed, which is worth your notice. Adopting a suggestion of Philumenus, he observes : “ The surgeon may see the cause of difficulty by distending the pudendum with an instrument : ” * that is, with a speculum. Such had been the practice of those days, to distend the vulva, vagina, and, if possible, the os uteri, to see the difficulty in the way of the child’s delivery. The effects of such practice soon showed themselves, in producing inflammation and increased difficulty in the delivery ; it was, therefore, given up. The use of the speculum, however, has been revived for another and most useful purpose ; and, strange to say, the opponents of that instrument have not hesitated to bring forward the practice of the days of Ætius, and the very instrument itself then used, as a powerful objection to its use in the present day ; as if the passage of an instrument into the vagina for the purpose of examining the non-gravid os uteri were the same thing as the introduction of a dilator to force open the perinæum, the vagina, and even the os uteri itself, for the delivery of the child. Ætius also describes a crotchet (*uncinus attractorius*) very like what Mauriceau had figured twelve centuries afterwards. He alludes also to a double crotchet, applied and used very like the modern forceps.

Such was the knowledge of midwifery among the Greeks and Romans. Among the Saracens, we find a further advance. Serapion, Rhazes, Avicenna, Albucasis, all wrote on midwifery. Rhazes invented the fillet ; and Albucasis describes a forceps similar in its

* “ Chirurgicus autem difficultatis causam, *per instrumentum pudendum diducens, conspicatur.*” (Ætius.)

object to the present forceps—that is, to save the child.

The advance which midwifery was making was, however, arrested; it could make no advance in the darkness of the middle ages. The knowledge formerly acquired was completely lost; and when the art of printing first shed its faint light on the surrounding darkness, we obtain some slight knowledge of its position. We find, in the year 1565, Dr. Raynalde publishing a translation of Rhodion's work, which was held in great esteem throughout Europe; nevertheless, it omits all the knowledge published by the Arabian physicians, and contains all the mistakes of Hippocrates, and the most objectionable features of his practice. The title of Raynalde's book is sufficiently expressive of the pompous style adopted by some of his successors—pompous in proportion to the ignorance it betrays. It is called *The Birthe of Mankind; or, the Woman's Book*. It was printed in black letter, and contained numerous precepts and recipes for midwives, as well as domestic hints to the patient herself, even to the use of cosmetics. This work, intended to benefit midwives, received from them the strongest opposition; it was looked upon as an inroad upon their profession, and an interference with their practice.

The breach made was actively followed up. The physician and the surgeon began to give obstetrics more of their attention; and, in 1573, Ambrose Paré had even the temerity to open wards in the Hôtel Dieu for the purpose of instructing midwives. His rash experiment would have failed, had he not some means of proving his superior knowledge. At that time, the opinion of Hippocrates prevailed, that a

woman having a cross-birth could not be delivered; and the only attempt ever made to save the woman was to try and replace the head. Ambrose Parè proved that, by seizing the feet, the child could be safely extracted.

This fact at once caused a revolution in practice; and his pupil Guillemeau brought it more strongly forward in 1598, in a work which he called *The Happy Delivery of Women*. Turning the child was the remedy, not only in cross-births, but even in difficulties when the head presented. The Hôtel Dieu became the great centre for instruction, not only in surgery, but in midwifery; and here we find Mauriceau standing conspicuously forward, not only as a leading practitioner, but an eminent teacher of midwifery. His work *Sur les Maladies des Femmes Grosses et de ceux qui sont Accouchées*, was published in 1668; and is valuable, not because of the doctrines it contains, because many of these have been discarded, but because of the faithful account of his own experience. He gives a detail of about 800 cases, which may be read in the present day with as much interest as when they were published. Smellie, at a later period, did the same thing, and his work is thus rendered equally valuable.

I mention these facts the more particularly because it proves the extreme importance of clinical midwifery, and leads me to urge upon you its study; to learn to note the cases you attend accurately and briefly. If you do this with patience, you will by and by have an accumulation from which you may select, and if you please may publish, what perhaps may prove a valuable collection of obstetric practice.

In the time of Mauriceau, there was no way of extracting the child, or of saving the woman, but by Ambrose Paré's operation of turning, or by using the crotchet, not in the way now adopted, but by fixing it outside the head, either in the orbit, the mouth, or the chin. Mauriceau contrived a *tire-tête*, an instrument to be placed inside, not outside the cranium; and, therefore, for this purpose, the head must be opened. This was done with a broad curved bistoury. Thus, the operation of craniotomy was introduced; which, in Mauriceau's hands, proved most successful, because at the sacrifice of the child, the mother's life was generally preserved.

Nearly about the same time (1650), a physician appeared in England, as remarkable for the success of his practice, and the reputation in which he was held, as Mauriceau was in Paris. This was Dr. Chamberlen, who invented a *secret mode* of delivering women without destroying the child. His secret was the *forceps*; and whether he obtained the secret from Albucasis, or it was his own invention, its leading feature was its secrecy. The secret was closely preserved, being made known only to his sons, who also practised midwifery; and it became in this manner a family inheritance.

The reputation of the Chamberlens spread, not only in England, but in France. They made the most unscrupulous use of their secret, delivering all cases indiscriminately. Mauriceau's *tire-tête* and Chamberlen's forceps stood opposed to each other; the advantage being in favour of Chamberlen, because the child was not destroyed.

Mauriceau was then in the zenith of his practice;

and Dr. H. Chamberlen (the son) went to Paris for the purpose of selling his secret. He boldly asserted that it was in his power to deliver any woman without destroying the child. It so happened that Mauriceau had a case of labour, where the contraction of the pelvis was so great from mollities ossium, that he could not extract the child with the *tire-tête*. Labour was protracted to the eighth day; and Chamberlen expressed his surprise that so eminent a man as Mauriceau could not deliver the woman, promising to do so in half an hour. He was given the opportunity; but after several half-hours had passed, she remained undelivered. Chamberlen gave it up in despair. The woman died the following day; and, on inspection, the uterus was found ruptured. This Mauriceau attributed to the forceps; and claimed a triumph for his *tire-tête* over such a vile instrument. Thus commenced the controversy between craniotomy and the forceps, which has lasted ever since.

We are now in the seventeenth century of our history; and our attention is at once arrested by the illustrious Harvey. He did not think obstetric medicine beneath his attention; but applied his great mind to the development of its principles. In 1651, he published his *Exercitationes de Generatione Animalium, de Partu, de Membranis et Humoribus Uteri*. In these, he not only brought forward his new doctrine of generation, *omnia ex ovo*, which displaced the absurd speculations of previous physiologists; but he also explained his views on the mechanism of parturition. He advocates Ambrose Paré's rule of turning by the feet in transverse positions. He mentions cases of superfœtation in women whom he

attended; and gives numerous illustrations of the durations of pregnancy both in man and the inferior animals. These essays, although no doubt composed long before, were not published until he had reached the advanced age of 73. To publish a work at such an age, when he could hardly hope to reap the profit of his industry, needs some explanation. The manner of the publication strongly proves the character of the man. Harvey lived in the troubled period of Charles I. and the Commonwealth; and from the persecution he experienced in consequence of his heretical doctrine of the circulation of the blood, he had long retired from practice and from public life. He was not, however, idle; he employed the greater portion of his time in his researches on ovology, a subject which he had followed so entirely for his own amusement, that his observations would have been lost to the profession, had it not been for a visit paid to him by his friend Dr. Ent. Among the many subjects of philosophical interest which formed the topics of their conversation, that of generation was alluded to, when Harvey casually referred to his own observations. Dr. Ent requested to see them; and having done so, earnestly begged to have them published. After some friendly altercation, Harvey gave him permission, "either to publish them now or to suppress them till some future time."

"I went from him" (says Dr. Ent) "like another Jason in possession of the Golden Fleece; and when I went home and perused them, I was amazed that so vast a treasure should have been so long hidden."

Thus appeared a work, second only to his treatise on the Circulation of the Blood, in the important change which it produced in the opinions of the pro-

fession. Roonhuysen, in Holland, a contemporary with Chamberlen, invented the vectis, which was also kept secret, until two public spirited practitioners, Jacob de Vischu and Hugo van der Poll, purchased the secret, and at once made it known to the world.

Thus, while this era was remarkable for the introduction of two very valuable instruments, which have introduced a most important change in the practice of midwifery, it was also distinguished by the introduction of a principle which has had a most mischievous effect upon it. Midwifery was, in the strictest sense of the term, an art; the mode of delivery a secret to be learned; and a meddlesome interference to abbreviate a natural process was considered an evidence of superior skill. Even in the present day the same doctrine has its advocates, and a meddlesome midwifery is considered by no means a bad one. With regard to Chamberlen and Roonhuysen, the great patrons of this practice, I can only consider them in the light of fortunate empirics, whose inventive genius contrived instruments by which they could cut short any labour, and who, by the powerful aid of mystery, made it available to their own aggrandisement.

Reflecting on the lives of Harvey and of Chamberlen, I cannot help contrasting the scientific eminence of the one with the trading spirit of the other; the poverty and persecution of Harvey with the affluence and reputation of Chamberlen. This unjust distinction seems not to have ceased even with their lives. When I first came to London I visited, like all strangers, the venerable pile which contains the ashes of your monarchs, your senators, your philosophers, your poets; and, while thus tracing through these a monumental

history of your country, my attention was arrested by an imposing cenotaph to Chamberlen. Chamberlen in Westminster Abbey! I could not help asking, where is Harvey? Echo answered, where? Chamberlen is, I believe, the only doctor (not a poet) there.

The seventeenth century is remarkable: first, for the great Harvey; secondly, for the introduction of very important operations in the practice of midwifery—craniotomy by Mauriceau, and the forceps by Chamberlen. Hence, during this century midwifery had been undergoing a gradual change in its character. Previously, it had been very much neglected; left altogether to midwives, unless the efforts of Nature failed in completing the delivery, then the “man-midwife” was called in. To ask for his assistance, under such circumstances, implied the necessity for an operation always fatal to the child and often extremely hazardous to the mother. The man-midwife might succeed in saving the mother; but his frequent want of success was anything but advantageous to him, and in no way contributed to raise him in public estimation.

The great success, however, of Mauriceau’s craniotomy, in saving the mother’s life in cases of great danger, and that of Ambrose Parè’s operation of turning (introduced in the sixteenth century), and of Chamberlen’s forceps in saving the child, caused a higher value to be placed upon his assistance. The gloomy apprehensions which clouded his character began to disappear, and more attention was consequently given to the improvement of midwifery.

The eighteenth century contains a much more numerous list of eminent obstetricians. Before then, no one but Harvey paid any attention to the mechanism of

parturition ; is was assumed that the head of the child passed in the conjugate axis of the pelvis, and nothing more was thought about it until Sir Fielding Ould made it the subject of his attention. Sir Fielding Ould was master of the Dublin Lying-in Hospital in 1760, the immediate successor of Bartholomew Mosse, its founder. He visited Paris, and was present at a labour delayed in consequence of the funis being round the neck of the child. He had the opportunity of observing the head descend and recede several times, the direction being with face towards the shoulder. Those present considered it to be a preternatural position, and no doubt would have interfered ; but, fortunately, a few pains completed the delivery. This fact was not lost on Sir Fielding Ould, and he made the manner in which the head is expelled the subject of constant experiment. He proved that the head did not pass through the pelvis in the conjugate axis but obliquely, and thus made the first step towards the only true path of obstetric knowledge—a careful and strict observation of facts. He first endeavoured to determine by accurate researches, not from preconceived notions, the natural course of parturition.

At this period, the invention of Chamberlen attracted much attention. The high value attached to a means of delivery in difficult cases by which both mother and child could be saved, made “the secret mode of delivering women” a most desirable problem to solve. Those who could not find it out, made it their business to condemn it in every possible way. Dr. Maubray was in this predicament ; and in his *Female Physician* found great fault with “the dangerous instruments then in use.” The female physician was the midwife,

and she quite agreed with Dr. Maubray. Others took a different view; and inventive genius was placed on the rack to discover the secret. Some succeeded in finding out the principle of the construction. A series of cases were detailed by Giffard, and published by Dr. Hody, in which a forceps is figured, but made differently from Chamberlen's. Afterwards, Chapman published a work especially for the purpose of making known the secret. The forceps of Chapman was similar to Giffard's; but that of Chamberlen was still a secret. The attention of the profession was now strongly directed to these instruments, and every effort made to improve them. The "man-midwife," as he was called, became an operator of no mean importance; being looked upon, not as he was formerly, the destroyer of human life; but as its preserver. Hence, obstetric instruments and their improvement occupied his entire attention; and though all agreed in offering improvements, the different writers of the period present a remarkable contrast in their manner of suggesting them. We may compare Burton with Smellie. We find Burton offering to his readers a most complicated machinery in most bombastic language. After describing the different instruments then in use, he proceeds to observe:

"These dangerous and tedious ways of delivering women induced me to spend a few serious thoughts in order to contrive some more safe and expeditious method of relieving the fair sex, and I hope my labour has not been in vain; and as I always professed myself an advocate to serve my country to the utmost of my power, I do in this (as I have hitherto done upon all occasions) prefer the public good to my own personal interest, and, therefore, now take this method of laying open to the world the improvement I have made, that every person may be as capable of assisting the fair sex as myself." (P. 231.)

A patriotic spirit alone leads Dr. Burton to prefer

the public good to his own private interest; and his patriotism is expended in contriving an instrument which few but he himself could employ. These instruments are now in the possession of the Obstetrical Society—here is a copy of them. Compare the language and the instrument—the inflation of the one, the complexity of the other: and they will give you some general idea of the man who was the original of Dr. Sterne’s celebrated character in *Tristram Shandy*, Dr. Slop, who broke the bridge of Master Shandy’s nose with “his vile instruments.” Very different was Smellie. To him we are indebted for leading improvements both in the forceps and other instruments, which are the basis of their present construction. He contrived the lock at present adopted in the English forceps. He also brought forward a scissors for perforating the cranium, in place of Mauriceau’s knife; this, as improved afterwards by Denman, became the perforator. The crotchet was placed inside the cranium, in place of the *tire-tête*; and the present operation of craniotomy was thus established. But Smellie did more than this. He made no boast of his inventions, but carefully studied Nature. Every case he attended was matter for observation and thought. He was puzzled by the explanations given of the passage of the head through the pelvis. He found that Sir Fielding Ould was right in his view; but, in order to satisfy himself, he measured the pelvis in almost every direction. He found that the widest space in the brim was the transverse, and in the cavity and outlet the antero-posterior. He therefore laid it down, that the head entered the brim transversely, passed through into the cavity, changing into the antero-posterior, in which it

was expelled. Thus, by a careful observation of facts, he revolutionised the theories of Mauriceau. He laid down rules for the forceps, never before understood; and placed operative midwifery on a foundation upon which the present superstructure is raised. Notwithstanding the reputation of Smellie, and his admitted skill in the application of instruments, such was the prejudice in the public mind against these operations, that he was obliged to perform his operations secretly. Chamberlen did so to conceal his invention; but Smellie was obliged to continue the practice, in order to avoid the attacks made upon him. His enemies were chiefly the midwives; and one of their strongest objections was the indecency of these operations—"the patient being exposed," &c. Smellie neither exposed his patient nor his instrument; nevertheless, they were not appeased. Dr. Burton attacked him, of course; but a more treacherous opponent assailed him under the assumed name of Mrs. Nihil. Smellie outlived these attacks, and laid the foundation of the present improvements in operative midwifery.

I have already stated that Smellie, like Mauriceau, published a large number of cases to illustrate his practice. These I should strongly recommend to your perusal. Study them, and learn how to note your own experience.

If we look back upon this course of obstetric history, we find that at first midwifery was scarcely considered to be worthy of the attention of medical men. The exertions of a few helped to remove this prejudice; but still it was considered as an art in which the ready application of instruments seemed to be the essential requisite. It was in no way viewed as an

object of scientific research, except by the immortal Harvey. It now presents itself in a different light. Smellie brought the art of midwifery to a high degree of perfection; but to William Hunter we are indebted for a scientific knowledge of parturition. He followed in Harvey's footsteps, and carefully traced all the changes which take place in the uterus during gestation. He pointed out the provisions of Nature for the dilation of the womb, the expulsion of the child, and the separation of the placenta. He demonstrated the muscular fibres of the uterus, and the arrangement of its arteries and veins. The result of his observations proved to him that midwifery was something more than an art. He found the artists of the profession too often only intruders on Nature's offices; and that sometimes her operations were not only interfered with, but frequently altogether deranged, by their ignorant meddling. He therefore enforced in his lectures the importance of viewing parturition as a natural process; that our attention should be directed to favour, not to hasten the efforts of Nature. He objected in the strongest terms against the advocates of a quick and secret mode of delivery. His protests proved the extent to which the practice had been carried, and the mischief it had done. His views, supported by the clearest demonstrative evidence, soon began to effect an important change in the practice of midwifery. He effected a most essential improvement in checking uncalled for interference, and in placing the study of midwifery on its true basis by showing it to be the study of Nature.

To William Hunter we are indebted for following up what Harvey had begun, and for recalling the

attention of the physiologist to a subject which has since been brought to a high state of improvement. He made embryology his study. He examined the successive changes in the ovum from the earliest germ to the matured infant, and seized with avidity every opportunity to illustrate his subject. The result was that splendid record of his industry, the *Illustrations of the Anatomy of the Gravid Uterus*. Whether we consider the success with which, under no common difficulties, he has demonstrated the development of the gravid uterus, of the fœtus, the general accuracy of his conclusions, the fidelity of his facts, the truth of his illustrations, we are equally astonished at the research and the surprising industry of the author. Hunter's plates differed from all that preceded them, in being faithful representations of Nature. They perfectly conveyed his beautiful dissections of the gravid uterus.

Towards the close of the eighteenth century, midwifery was gradually rising into position, and obstetric authors became more numerous. Perfect, Aikins, Bland, Osborne, Denman, John Clark, Rigby of Norwich, Joseph Clarke of Dublin, Hamilton of Edinburgh, all contributed their quota to the general stock of obstetric knowledge. The instruments employed were greatly improved ; the rules for using them more clearly laid down. But, what was of equal importance, a check was given to their too frequent use, especially the forceps. The process of Nature in parturition was better understood ; and the accoucheur was called in not merely to operate, but to determine whether an operation might be dispensed with. His advice became valuable as the obstetric physician.

The public began to repose in him more of their confidence, and his assistance was sought for more frequently in ordinary labours. He gradually took the place of the midwife, who was, in fact, superseded, except in the lower classes.

Among these authors, I shall direct your attention to Denman, not only as following Hunter more directly in the order of our history, but as being the author of a work which was justly considered to be the standard authority of its day. Denman avoided the extremes of Smellie and of Hunter. He was less bold than the former in the use of the forceps, less hesitating than the latter when interference was called for. Holding as it were the balance between these great men, the principles he laid down were considered to be the safest guides for practice. To those of you who would wish to make midwifery especially your study, I should strongly recommend his work. I do so because it is the result of an extensive personal experience, improved by a sound and unbiassed judgment. If the study of an author can communicate any sympathetic influence, if the tone of the author's mind can be so conveyed, I have an additional reason for recommending him to your attention. If you can acquire from Denman the same caution in avoiding the precipitate intermeddling which was then, as I fear it is now, too frequently met with; if you are taught to exercise the same calm discrimination in the difficulties of practice; if, along with your increasing experience, your judgment is equally improved by his observations, and you can exercise the same clearness in arriving at a correct conclusion, — you will be fully repaid by studying

Denman, and imbibing the sound reasoning with which his doctrines are laid down.

The influence of these eminent men — William Hunter, Denman, Osborne, Joseph Clarke of Dublin — conspired to arrest the practice of interfering with labours, and delivering unnecessarily with instruments, which they found to be so mischievous; but their caution was carried to too great an extreme. Labours were allowed to go on far too long before assistance was rendered; and the result generally ended in the death of the child, if not of the mother. Hence we find Dr. Hamilton of Edinburgh, and Dr. Burns of Glasgow, protesting against such delays; and the question became one of active, if not angry controversy.

While, in Great Britain, these noisy controversial discussions were going forward, on the continent a far more interesting and practical question was silently making its way; and a knowledge of the manner in which the child passes through the pelvis was, and is now, being more accurately ascertained.

Formerly, as I have stated, the head was supposed to pass through the pelvis in the conjugate axis. Smellie with great pains disproved this, and showed, from his measurements of the pelvis, that it must enter the brim in the transverse axis, and be expelled in the conjugate. This law, however, was determined upon in his study, not at the bedside; hence he fell into the views of Deventer, Levret, and others, who looked upon the mechanism of parturition as a scientific problem, to be demonstrated like any proposition in Euclid. But a different mode of determining this question, than in the study with a pelvis and a pair of compasses, was adopted by Saxtorph of Copenhagen, so early as 1772.

He published a work on the subject*—a work little known here, but now brought before us by Dr. Leishman of Glasgow, in his admirable work on *The Mechanism of Parturition*. Saxtorph stated that the head passed neither in the transverse nor the conjugate axis, but in the oblique. We find Saxtorph followed by Solayrés de Renhac, who not only agrees with Saxtorph's view of the oblique descent of the head, but enumerates six different positions in which it may pass. These positions were afterwards published by his distinguished pupil, Baudeloque, who observed of his master, Solayrés de Renhac, "Il n'avait que la nature pour maitre." This knowledge was obtained, not in the closet, but at the bedside of the patient. To make these researches accurate, Saxtorph laid down strict rules for making a vaginal examination. He says :

"An improper mode of examination often hinders the recognition of truth. When, for example, the woman is not placed in such a position that the finger may find an easy entrance for examination. When the woman, *as is here the fashion*, lies on soft pillows. When the body is not held motionless in the proper posture, or the interval between the pains is neglected for the examination of the position of the head; or when, although all these circumstances are observed, the finger is not carefully and observingly carried round all the parts of the head and the margins of the pelvis, by which means only it can reach them. If the nearest facts only, and not those deeper, are observed, we cannot recognise with exactness the fontanelle lying high and obliquely backwards, together with the presenting sutures, and their relation to the extent of the pelvis." (Leishman's *Mechanism of Parturition*, p. 33).

Thus, by determining the position in which the head passed through the pelvis, not by preconceived or what might be called mathematical notions, but by actual observations, Saxtorph pointed out the true principle which should be adopted in determining truth.

* "Theoria de diversa partu ob diversam capitis ad pelvim relationem mutuam experientiâ fundata."

The positions given by these men, by Baudeloque, by La Chapelle, and others, were received by the profession without further inquiry, until Naegelè took up the question. He, like Saxtorph and Solayrés de Renhac, determined to judge for himself, and took the utmost pains to ascertain the course followed by the head, and proved that the motion was one of rotation; that what is called the first position was the easiest to pass; but that when the head entered the pelvis, in the third or more difficult position, it was rotated as it advanced into the second. I shall again have an opportunity of explaining to you his views: but, at present, my object is to show you the foundation of Naegelè's reputation; being a close, painstaking observer, taking nothing for granted, but proving by actual observation every fact which he brought forward.

In the history which I have now brought before you, the lessons which it teaches are not hard to learn. We find, in the early periods of obstetric practice, great bombast and little real knowledge. The delivery of women was considered as an art to be learned, not as a natural process to be observed; and, inasmuch as any woman may be delivered by instruments the moment the head comes within their reach, the artists of the profession made their fortunes by their skill in relieving the patient from her sufferings. The injuries which followed their operations led to a strong reaction, and the most eminent men of the eighteenth century were unanimous in their condemnation of this practice.

As yet, however, but slight attention was given to ordinary labours. When any difficulties occurred, or operations were required, all such questions were carefully examined and rules laid down for practice; but

the phenomena of natural labour were left, in the strictest sense, to Nature. On the continent, however, Saxtorph, Solayrés de Renac, Baudeloque, and Naegelè took a different view. Every case they attended was a subject of interesting inquiry. They educated their sense of touch to the highest point; and, carefully watching the progress of natural labour, they ascertained that the head did not descend in one position, as was supposed, but in several. The frequency of these positions is at present a subject of close observation with the scientific accoucheur.

The lesson which these eminent men have taught us is the value of patiently observing natural labour. They pointed out the instruction you derive from them. They showed the greater facility you acquire in at once recognising a difficulty. The acute sense of touch, which enabled Naegelè to mark the progress of the head, at once enabled him to perceive what may retard its advance, and perhaps to remove the impediment before it obstructed the action of the uterus. I only ask you, gentlemen, to follow his example, not to be governed in your views of obstetric practice by what are called authorities, but to judge for yourselves. Nothing is so easy as to follow an authority, once you decide who is to be your guide. I should rather ask you to seek, at the bedside of your patient, a knowledge of the truth. I would ask you to make every case you attend a subject for observation, and briefly to note the facts you have ascertained. You will thus acquire that *tactus eruditus* so essential to successful practice.

I am induced to press this point upon your attention, more particularly because formerly—indeed, I might

say, until very lately—no interest was taken in natural labours; all attention was given to cases of difficulty or danger. Hence the obstetric student was very anxious to witness operations, to watch the treatment of hæmorrhages, &c.; but the ordinary cases of labour he was given to attend were thought to be a bore. Six cases of labour were considered sufficient by the examining bodies as a test of practical knowledge; but when that number was increased to twelve, and to twenty, the students were startled, and many of them thought this to be too great a demand upon their patience. I have endeavoured to prove, from the history of midwifery, the reverse; and would convince you that it was the want of attention to natural labour which led to so many mistakes when it became difficult. I am anxious to prove to you that the most eminent men in the profession, like Mauriceau, like Smellie, like Hunter, like Naegelè, noted all their cases; and these cases formed the basis of their future reputation. You can do the same; and, if you wish to practise midwifery successfully, I would say, in conclusion, do not trust implicitly to books, which can be read in your studies; neither be governed by authorities, which are often wrong; but let your study be the bedside of your patient, and your book—*the book of Nature*.